

divisional of U.S. application Ser. No. 08/404,949, filed March 15, 1995, which is a continuation of U.S. application Ser. No. 08/129,379, filed September 30, 1993.

BACKGROUND OF THE INVENTION--;

Page 2, after line 20, please insert:

--BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 demonstrates the purification of the sFv-hu $\beta$ -Gluc fusion protein by TSK 3000 gel chromatography.

FIG. 2 shows the nucleotide sequences of oligonucleotides pAB-Back, linker-anti, linker-sense, and V<sub>H</sub>(Mut)-For.

FIG. 3 is a schematic representation of the amplification of the V<sub>H</sub> gene, including the signal sequence intrinsic to the V<sub>H</sub> gene, from the plasmid pABstop 431V<sub>H</sub>hum (V<sub>H</sub>431/26) by PCR using oligonucleotides pAB-Back and linker-anti, and the amplification of the V<sub>L</sub> gene from pABstop 431V<sub>L</sub>hum (V<sub>L</sub>431/26) by PCR using oligonucleotides linker-sense and V<sub>L</sub>(Mut)-For.

FIG. 4 is a schematic representation of the amplification and fusion of the V<sub>H</sub>431/26 and the V<sub>L</sub>431/26 gene fragments by PCR.

FIG. 5 is a schematic representation of the cloning of the sFv 431/26 fragment into the expression vector pAB 431V<sub>H</sub>hum/C<sub>H</sub>1 + 1H/ $\beta$ -Glc, which contains the hu $\beta$ -glucuronidase gene.

FIG. 6 is a schematic representation of the plasmid pRMH 140, which harbors a neomycin-resistance gene.

FIG. 7 is a schematic representation of the plasmid pSV2, which harbors a methotrexate-resistance gene.

FIG. 8 shows the nucleotide sequences of oligonucleotides sFv for (2561), sFv back (2577), Hum.β-Gluc. back oligo (2562), Hum.β-Gluc. for oligo (2540), PCR oligo VH<sub>p</sub>IXY back (2587), and PCR oligo VK<sub>p</sub>IXY for (2627).

FIG. 9 is a schematic representation of the amplification of the single-chain Fv, sFv 431/26, by PCR using oligonucleotides 2561 and 2577, and the cloning of that single-chain Fv into the vector pUC19.

FIG. 10 is a schematic representation of the amplification of the human β-glucuronidase gene from the plasmid pAB 431V<sub>h</sub>hum/CH1 + 1H/huβ-Gluc by PCR using oligonucleotides 2562 and 2540, and the ligation of that gene into the plasmid sFv 431/26 in pUC19.

FIG. 11 is a schematic representation of the amplification of a KpnI/NcoI fragment from the sFv 431/26 by PCR using oligonucleotides 2587 and 2627, and the cloning of that fragment into the yeast expression vector pIXY.

FIG. 12 is a schematic representation of the ligation the BstEII/HindIII fragment from the plasmid sFv 431/26 hu $\beta$ -Gluc in pUC19 into the vector pIXY 120 containing a V<sub>H</sub> gene, a linker, and a part of a V<sub>L</sub> gene.

FIG. 13 shows the nucleotide sequences of oligonucleotides E. coli  $\beta$ -Gluc. for (2639) and E. coli  $\beta$ -Gluc. back (2638).

FIG. 14 is a schematic representation of the amplification of the E. coli glucuronidase gene from the plasmid pRAJ275 by PCR using oligonucleotides 2638 and 2639, and the ligation of that gene into sFv 431/26 in pUC19.

FIG. 15 is a schematic representation of the cloning of the BstEII/HindIII fragment from the plasmid sFv 431/26 E. coli  $\beta$ -Gluc in pUC19 into the vector pIXY 120.

FIG. 16 shows the nucleotide sequences of oligonucleotides PCR oligo VH<sub>p</sub>IXY back (2587), PCR oligo VK<sub>p</sub>IXY/ $\beta$ -lactamase for (2669), PCR oligo link/ $\beta$ -lactamase back (2673), and PCR oligo  $\beta$ -lactamase for (2674).

FIG. 17 is a schematic representation of the amplification of sFv 431/26 by PCR using oligonucleotides 2587 and 2669, and the cloning of sFv 431/26 into the vector pUC19.

FIG. 18 is a schematic representation of the amplification of the  $\beta$ -lactamase II gene from the complete DNA of *Bacillus*

cereus by PCR using oligonucleotides 2673 and 2674, and the cloning of that gene into the vector pUC19.

FIG. 19 is a schematic representation of the ligation of a BclI/HindIII fragment of the  $\beta$ -lactamase gene into sFv 431/26 in pUC19.

FIG. 20 is a schematic representation of the ligation of the KpnI/HindIII sFv  $\beta$ -lactamase fragment into the vector pIXY 120.--;

Page 4, line 19, please delete "sequence" and substitute therefor ~~the~~ the nucleotide sequence of SEQ ID NO:1, which codes for the amino acid sequence of SEQ ID NO:2-~~the~~

Page 4, line 20, delete "indicated in Table 1";

Page 6, line 15, delete "Table 4" and substitute therefor --Table 1--;

Page 6, line 27, delete "Table 5" and substitute therefor --Table 2--;

Page 7, line 12, delete "Table 4" and substitute therefor --Table 1--;

Page 7, line 32, delete "Table 6" and substitute therefor --Table 3--;

Page 8, line 12, delete "Table 4" and substitute therefor --Table 1--;

Page 8, line 24, delete "Table 4" and substitute therefor  
--Table 1--;

Page 10, line 3, after "pAB-Back", insert --(SEQ ID NO:3)--,  
and after "linker-anti", insert --(SEQ ID NO:4) (FIG. 2)--, and  
delete "(Tab. 2)";

Page 10, line 6, after "(V<sub>H</sub>431/26)", insert --(FIG. 3)--;

Page 10, line 7, after "linker-sense", insert --(SEQ ID  
NO:5)--;

Page 10, line 8, after "V<sub>L(Mut)</sub>-For", insert --(SEQ ID NO:6)  
(FIG. 2)--, and delete "(Tab. 3)";

Page 10, line 9, after "(V<sub>L</sub>431/26)", insert --(FIG. 3)--;

Page 10, after line 9, delete the figure;

Page 11, line 27, after "linker", insert --(FIG. 4)--;

Page 12, after line 4, delete the figure;

Page 13, line 14, after "(pMCG-E1)", insert --(FIG. 5)--;

Page 13, after line 14, delete the figure;

Page 14, line 5, after "gene", insert --(FIG. 6)--;

Page 14, line 7, after "gene", insert --(FIG. 7)--;

Page 14, after line 10, delete the figure;

Page 15, delete the figure;

Page 22, line 4, after "2577", insert --(SEQ ID NO:8)--,  
after "2561", insert --(SEQ ID NO:7) (FIG. 8)--, and delete  
"(Table 7)";

Page 22, line 6, delete "(Fig. 2)" and substitute therefor  
--(FIG. 9)--;

Page 22, line 8, after "2562", insert --(SEQ ID NO:9)--,  
after "2540", insert --(SEQ ID NO:10) (FIG. 8)--, and delete  
"(Table 8)";

Page 22, line 10, delete "(Fig. 2)" and substitute therefor  
--(FIG. 9)--;

Page 22, line 11, delete "(Fig. 3)" and substitute therefor  
--(FIG. 10)--;

Page 22, line 12, after "2587", insert --(SEQ ID NO:11)--;

Page 22, line 13, after "2627", insert --(SEQ ID NO:12)  
(FIG. 8)--, and delete "(Table 9)";

Page 22, line 15, delete "(Fig. 4)" and substitute therefor  
--(FIG. 11)--;

Page 22, line 17, delete "(Fig. 3)" and substitute therefor  
--(FIG. 10)--;

Page 22, line 21, delete "(Fig. 5)" and substitute therefor  
--(FIG. 12)--;

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Page 23, line 6, after "2638", insert --(SEQ ID NO:14)--,  
and after "2639", insert --(SEQ ID NO:13)--;

Page 23, line 7, delete "(Table 10)" and substitute therefor  
--(FIG. 13)--;

Page 23, line 8, delete "Fig. 2" and substitute therefor  
--FIG. 9--, and delete "Fig. 6" and substitute therefor  
--FIG. 14--;

Page 23, line 11, delete "Fig. 4" and substitute therefor  
--FIG. 11--;

Page 23, line 12, delete "(Fig. 7)" and substitute therefor  
--(FIG. 15)--;

Page 24, line 5, after "2587", insert --(SEQ ID NO:15)--,  
after "2669", insert --(SEQ ID NO:16) (FIG. 16)--, and delete  
"(Table 11);

Page 24, line 7, delete "(Fig. 8)" and substitute therefor  
--(FIG. 17)--;

Page 24, line 9, after "2673", insert --(SEQ ID NO:17)--;  
Page 24, line 10, after "2674", insert --(SEQ ID NO:18)  
(FIG. 16)--, and delete "(Table 11);

Page 24, line 12, delete "(Fig. 9)" and substitute therefor  
--(FIG. 18)--;

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Page 24, line 14, delete "(Fig. 10)" and substitute therefor  
--(FIG. 19)--;

Page 24, line 17, delete "(Fig. 11)" and substitute therefor  
--(FIG. 20)--;

Pages 25-29, please delete Tables 1-3;

Page 30, line 1, delete "Table 4", and substitute therefor  
--Table 1--;

Page 31, line 1, delete "Table 5", and substitute therefor  
--Table 2--;

Page 32, line 1, delete "Table 6", and substitute therefor  
--Table 3--; and

Pages 33-36, please delete Tables 7-11.

**IN THE DRAWINGS:**

Please renumber Figures 2-11 to correspond to new Figures 9-12, 14, 15, and 17-20, respectively, and add new Figures 2-8, 13, and 16, as indicated in the attached Request for Approval of Drawing Changes submitted concurrently herewith. New figures 2-8, 13, and 16 correspond to deleted Tables 2, 3, and 7-11 on pages 29 and 33-36 of the specification, and deleted drawings on pages 10 and 12-15 of the specification. No new matter has been added.